

LISTING OF CLAIMS

Claims 1-23 (Deleted)

Claim 24 (Original) An intermittent coating apparatus comprising:

intermittent means which intermittently feeds a paint to a nozzle; and

paint returning means which repeats suction and return of said paint out of and into said nozzle by making a bellowphragm disposed in said nozzle move up and down.

Claim 25 (Original) The intermittent coating apparatus according to claim 24, wherein

the paint is sucked out of said nozzle in an amount of not smaller than 0.01 cc and not larger than 10 cc.

Claims 26-30 (Deleted)

Claim 31 (Original) An intermittent coating apparatus comprising:

a nozzle which applies a paint to a base material,

intermittent means which repeats feeding and stopping of said paint to said nozzle as well as discharge and stopping of said paint to a return side, and

a mixer which is disposed in a flow path between said nozzle and said intermittent means.

Claim 32 (Original) The intermittent coating apparatus according to claim 31, wherein

said mixer has a length which is not shorter than 1 mm and not longer than 200 mm.

Claim 33 (Original) The intermittent coating apparatus according to claim 31, wherein

said mixer has a diameter which is not shorter than 5 mm and not longer than 100 mm.

Claim 34 (Amended) An intermittent coating method for intermittent coating by utilizing an intermittent coating apparatus comprising a nozzle which applies a paint to a base material and intermittent means which repeats feeding and stopping of said paint to said nozzle as well as discharge and stopping of said paint to a return side, wherein

said intermittent means stops the discharge of the paint to said return side after starting the feeding of the nozzle to said nozzle, at least at a coating start time.

Claim 35 (Original) An intermittent coating method for intermittent coating by utilizing an intermittent coating apparatus comprising a nozzle which applies a paint to a base material and intermittent means which repeats feeding and stopping of said paint to said nozzle as well as discharge and stopping of said paint to a return side, wherein,

said intermittent means starts the discharge of the paint to said return side after stopping feeding of the paint to said nozzle, at least at a coating end time.

Claim 36 (Original) An intermittent coating method for intermittent coating by utilizing an intermittent coating apparatus comprising intermittent means which intermittently feeds a paint to a nozzle and paint returning means which repeats suction and return of said paint out of and into said nozzle, wherein

an operation time A to suck said paint out of said nozzle and an operation time B to return said paint into said nozzle are in a relation of $A < B$.

Claim 37 (Original) An intermittent coating method for intermittent coating by utilizing intermittent means which intermittently feeds a paint to a nozzle, wherein

said method allows said paint to be sucked and returns out of and into said nozzle by moving up and down a bellowphragm disposed in said nozzle.

Claim 38 (Original) An intermittent coating method for intermittent coating by utilizing an intermittent coating apparatus comprising a nozzle which applies a paint to a base material and intermittent means which repeats feeding and stopping of said paint to said nozzle as

well as discharge and stopping of said paint to a return side, wherein,

a feeding side two-way valve for repeating feeding of said paint to said nozzle and stop of the feeding and a return side two-way valve for repeating discharge of said paint to the return side and stop of the discharge which compose said intermittent means, are independently controlled.

Claim 39 (Original) An intermittent coating method for intermittent coating by utilizing an intermittent coating apparatus comprising a nozzle which applies a paint to a base material intermittent means which repeats feeding and stopping of said paint to said nozzle as well as discharge and stopping of said paint to a return side and a mixer which is disposed in a flow path between said nozzle and said intermittent means, wherein

a pressure loss is produced by said mixer.

Claim 40 (New) A method of intermittent coating using an intermittent coating apparatus including a nozzle which applies a coating to a base material; and intermittent coating supply means which intermittently feeds the coating to the nozzle, stops the feeding of the coating to the nozzle, and discharges remaining coating to a return side, the intermittent coating supply means having a coating tank, a flow path supplying coating from the coating tank, the flow path including a feeding side in communication with the nozzle, a return side in communication with the coating tank, and a segment that connects the feeding side and the return side, a feeding side two-way valve, positioned between the flow path segment and the feeding side of the flow path, that intermittently feeds and stops the feed of the coating to the nozzle, and a return side two-way valve, positioned between the flow path segment and the return side of the flow path, that intermittently discharges remaining coating to the tank through the return side of the flow path, and stops discharge of the remaining coating to the tank through the return side of the flow path, the return side two-way valve discharging the coating to the return side during at least a prescribed period of time from the time of starting of feeding of the coating by the feeding side two-way valve, and thereafter stopping the discharge of the coating to the return side, said method comprising:

- a) rolling a base material along a back roll spaced a predetermined distance from the nozzle;
 - b) starting the extruding of coating from the nozzle by opening the feeding side two-way valve and closing the return side two-way valve;
 - c) applying the coating to the base material through the nozzle;
 - d) stopping the extruding of coating from the nozzle by closing the feeding side two-way valve and opening the return side two-way valve; and
 - e) repeating preceding steps b) to d) as necessary to obtain an intermittently coated base material.

Claim 41 (New). The method according to claim 40, wherein the time of opening the feeding side two-way valve when starting the extruding is earlier than the time of closing the return side two-way valve within a range of not less than 5 msec and not more than 500 msec.

Claim 42 (New) The method according to claim 41, wherein the range of time is not less than 5 msec and not more than 100 msec.

Claim 43 (New) The method according to claim 40, wherein the time of closing the feeding side two-way valve when stopping the extruding is earlier than the time of opening the return side two-way valve within a range of not less than 0 msec and not more than 100 msec.

Claim 44 (New) A method of intermittent coating using an intermittent coating apparatus including a nozzle which applies a coating to a base material; and intermittent coating supply means which intermittently feeds the coating to the nozzle, stops the feeding of the coating to the nozzle, and discharges remaining coating to a return side, the intermittent coating supply means having a coating tank, a flow path supplying coating from the coating tank, the flow path including a feeding side in communication with the nozzle, a return side

in communication with the coating tank, and a segment that connects the feeding side and the return side, a feeding side two-way valve, positioned between the flow path segment and the feeding side of the flow path, that intermittently feeds and stops the feed of the coating to the nozzle, a return side two-way valve, positioned between the flow path segment and the return side of the flow path, that intermittently discharges remaining coating to the tank through the return side of the flow path, and stops discharge of the remaining coating to the tank through the return side of the flow path, the return side two-way valve discharging the coating to the return side during at least a prescribed period of time from the time of starting of feeding of the coating by the feeding side two-way valve, and thereafter stopping the discharge of the coating to the return side, and coating returning means which intermittently draws the coating out of the nozzle and returns the coating to the nozzle, the coating returning means returning the coating to the nozzle at the time of starting the feeding of the coating to the nozzle at the coating start time, and drawing the coating out of the nozzle at the time of stopping the feeding of the coating to the nozzle, said method comprising:

- a) rolling a base material along a back roll spaced a predetermined distance from the nozzle;
- b) starting the extruding of coating from the nozzle by opening the feeding side two-way valve, closing the return side two-way valve, and returning the coating to the nozzle with the coating returning means;
- c) applying the coating to the base material through the nozzle;
- d) stopping the extruding of coating from the nozzle by closing the feeding side two-way valve, opening the return side two-way valve, and drawing the coating out of the nozzle with the coating returning means; and
- e) repeating preceding steps b) to d) as necessary to obtain an intermittently coated base material.

Claim 45 (New) The method according to claim 44, wherein a control means is provided for controlling an operation time A to draw the coating out of the nozzle, and an operation time B to return the coating to the nozzle, so that the operation time A is less than the operation

time B.

Claim 46 (New) The method according to claim 45, wherein the coating is drawn out of the nozzle in an amount of not less than 0.01 cc and not more than 10 cc.

Claim 47 (New) The method according to claim 45, wherein the coating is returned to the nozzle at a flow rate of not less than 1 cc/msec.

Claim 48 (New) The method according to claim 45, wherein the coating returning means uses a piezoelectric element.